

## PRIZES OFFERED FOR MOTOR FUEL

Awards Totalling \$111,000 to  
Discoverer of Substitute  
for Gasoline.

### INTEREST IS KEEN ABROAD

High Cost of Petrol There Is  
Stimulating Engineers to  
Solve Problem.

There is no one thing in which motorists are more generally interested than in the fuel question, saving and excepting perhaps only a tire that will give unlimited service without punctures or blowouts. The fuel problem is more serious abroad than in this country because higher prices for gasoline have reigned there for a much longer time, and in some parts of France, for instance, petrol is sold at 75 cents a gallon, with no refund in sight.

Such figures have not been reached yet in the United States except in very remote regions and under exceptional circumstances. Still, with threats of shortage of supply and consequent increased prices of gasoline in the United States, there is very good reason for motorists here to be looking for something "just as good" and much cheaper. Automobileists are not looking for gasoline to go any higher. They think they are paying enough for it here without any further increase. This is the more so because the current idea among automobilists is that they are being called on to pay high prices solely because the producers of the fuel know they can get the money and in spite of their strong belief that there are no economic reasons for the advance in the price of fuel.

Nearly everything is being tried in this country and abroad to furnish the answer to the fuel problem. Sunflower seed as a source of motor fuel is a British contribution to the subject, with the estimate that this can be produced at sixpence a gallon. One American motor journal says, something satirical about "sunflower seed."

In this country not long ago experiments were made with kerosene modified with denatured alcohol, a fuel of great economy and worth. It was announced. Most persons believe it is a move in the wrong direction when any attempt is made to combine kerosene with anything else in order to produce a motor fuel, for the idea seems to be that as long as there is one main control over the production of petroleum and its various cuts prices of any one of them will ascend the moment it becomes more available for motor car use.

However, there are some good reasons for believing that some sort of substitute will be produced, because engineers are at work on the problem in competition for two prizes. One is an offer of \$100,000 made by the International Association of Recognized Automobile Clubs for the best substitute for gasoline. The discoverer of this fuel agrees in taking the prize to give to the world the results of his discovery and to take the \$100,000 prize as his full reward. Of course, such a fuel commercially available in the end would bring far more to any inventor or discoverer and his associates.

Another prize is one of about \$11,000 offered by the Society of Motor Manufacturers and Traders of London for a fuel less costly than gasoline to be produced entirely from materials available in Great Britain and obtainable in quantities commensurate with the increasing demand. It is thought that coal or some other material easily and cheaply obtained may be used in a producer in a way so as to solve the gasoline problem.

### LIMOUSINES BUILT HERE.

Ranney Company to Supply Them for  
Local Buyers of Hudsons.

According to its latest catalogue, the Hudson Company will build only one type of closed body for the season of 1914, an inside drive known as a sedan. In this particular car there are accommodations for five persons, including the driver. It is especially for the man who does his own driving and is designed so that the occupants will be together.

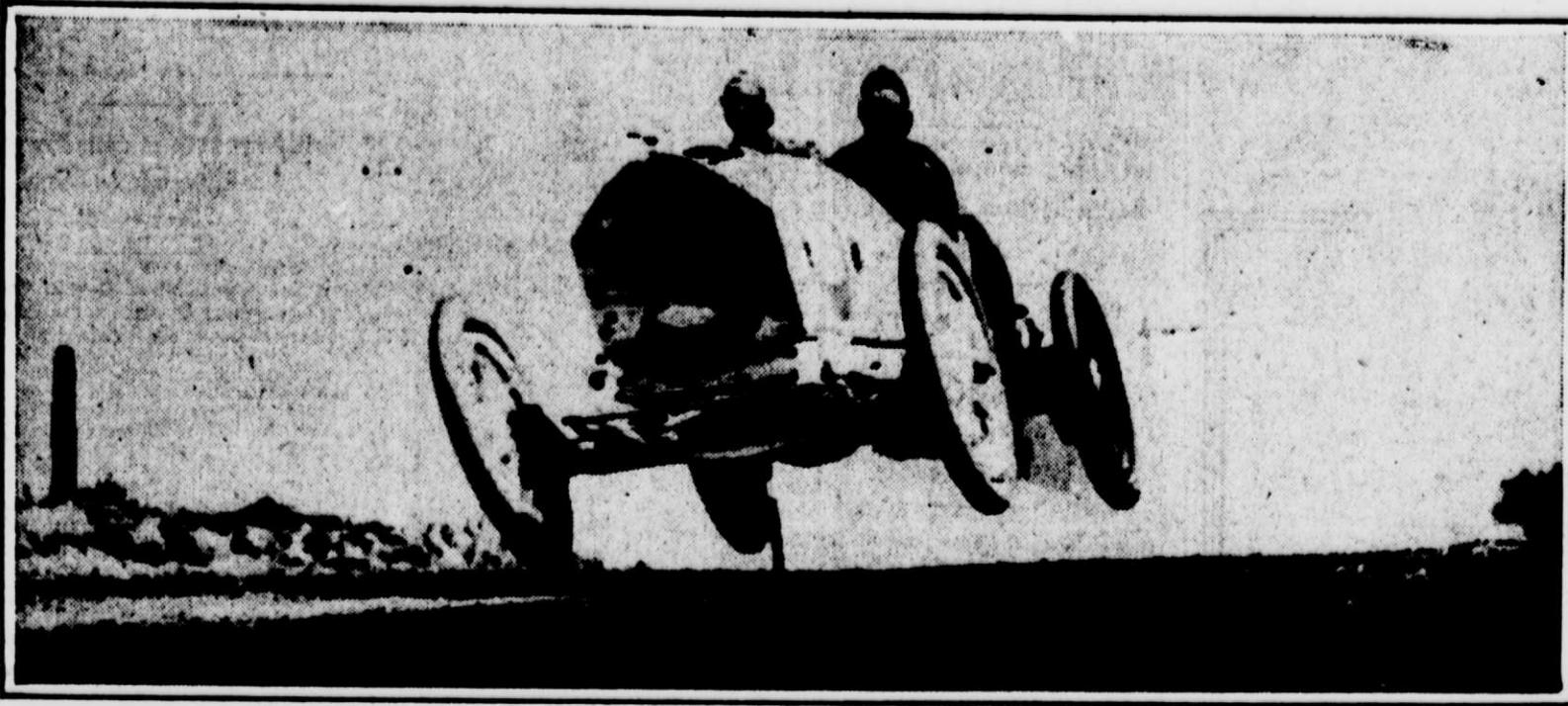
To meet the demands of the New Yorker, who with few exceptions employs a chauffeur and wants a separate compartment for his family and guests, the Elliott Ranney Company, Eastern agents for the Hudson, has contracted with one of the largest body builders in New York to furnish as many limousine bodies as they may need.

### CARS GIVEN AS PRIZES.

Furnishings Jobbers Stand Chances  
to Win Six Overlands.

Six jobs of men's furnishings in various parts of the United States are to experience a pleasant variation from everyday business returns within the next few weeks. Each of the six, who have yet to be chosen, is to be presented with an Overland touring car by the C. A. Edgerton Manufacturing Company of Shirley, Mass., makers of suspenders. The Edgerton company purchased the six Overlands last week from the C. T. Silver Motor Company, metropolitan distributor of that line. The cars are to be given as prizes to the jobbers who dispose of the largest number of the Massachusetts concern's suspenders in a given period.

## Racing Car at Top Speed With All Four "Feet" in the Air



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This is the state in which Gil Anderson finished first in the recent race for the Elgin National trophy, making a record for average speed over that course. Some idea of the velocity can be gained by this picture, which shows the racer on a slight curve, having struck a bump in the course, with not one tire touching the path.

## CAR BUILDERS HAVE ROAD MAKING CREED

Announce Principles They Think  
Should Rule in Highway  
Construction.

### MODERN SYSTEM NEEDED

Old MacAdam Ideas Not Up to  
the Requirements of  
Mixed Traffic.

Permanent roads are advocated by the motor car manufacturers of the country as a solution of the vexed problem of highway improvement and maintenance. Traffic conditions have changed rapidly in the last decade and will continue to change until power driven vehicles constitute the predominating traffic on the public roads. Already in Massachusetts more than 63 per cent of the traffic on the State roads is self-propelled.

It is acknowledged that the roads that have been built under the principles laid down by MacAdam a century ago cannot stand the increased volume and greater weights and speeds of the mixed traffic of today. The cost of maintaining the present State roads amounts to more than \$500 a mile a year in the Bay State, and is increasing annually. Motor car manufacturers believe that the only way to prevent the upkeep of roads from becoming an insupportable burden is to cease at once the building of roads that go to pieces under the traffic and in their stead construct roads that will have real durability of surface as well as of foundation—roads, in short, that will last at least as long as the life of the bonds issued to pay for them.

The Automobile Chamber of Commerce, representing ninety-five leading automobile and motor truck manufacturers, has taken notice of the situation and placed itself on record in this matter by the action of its committee. The commercial vehicle committee at a meeting held in Cleveland August 26 resolved "That we realize thoroughly the necessity of improved road conditions . . . and believe it is advisable to adopt the construction that, after thorough investigation, will give the greatest permanency, first cost being of lesser importance."

On September 3 the executive committee adopted unanimously the report of the road committee, which embraced the following declaration of principles outlining the ideas of the members on the subject of road improvement:

1. Highway construction is a scientific and engineering problem.
2. Proper location, grading and drainage are first essentials of any good road.
3. Highways should be of a character directly suited to the kinds and volume of traffic using them. It is uneconomical and a waste of time and money to build roads unsuited to the volume and character of traffic and of short durability.
4. Road foundations, culverts, retaining walls and road base should have a durability equal to or exceeding the life of the bonds issued to pay for the construction of the roads.
5. When appropriations are made for road improvement, suitable and sufficient provision should be made for maintenance of the improved roads during the life of the bonds issued to pay for them.
6. Volume of traffic and kinds, speed and weights, with loads of vehicles using the roads should be ascertained before beginning the construction of a State road by taking a traffic census, and the rate of increase and change of character should be calculated well into the future.
7. Construction or reconstruction of all main thorough roads between important trade centres, State capitals and centres of large population (50,000 or over) not more than 100 miles apart should be of permanent character.
8. Roads which sustain a considerable volume of mixed horse and motor vehicle traffic should have a surface that will not ravel under such traffic, that will not become dusty by attrition and the effects of weather, that will be impervious to water, and will not be loosened by frost.
9. Until such time as traffic over subsidiary roads and relatively little used country roads warrants improvement with permanent construction, they should be maintained in serviceable condition for the traffic using them by relatively inexpensive

### THE ACTIVE MERCER "MONK."

A Car That Has Competed Successfully in Many Distance Races.

The Mercer raceabout, christened the Monk, which Louis Nikrent piloted into third place in the recent Santa Monica road race, is the same car that Hughie Hughes took through a successful campaign the season of 1911 and which was driven by De Palma in his Pacific coast races the following season. The Mercer Monk is said to have been a participant in many long distance contests than any other machine ever built in this country.

Early in 1911 Hughes took over the car and in the races on the Florida Beach in March of that year he cleaned up everything in the 300 cubic inch class. Two months later the same car was entered in the 500 mile race at Indianapolis and although it was the smallest machine in the contest in point of piston displacement it finished within the prize money in twelfth place. In this long grind it averaged 67.5 miles an hour. Following this it won the 170 mile Kane county trophy race at Elgin on August 27 and on the next day it went out of its class to enter the Elgin national trophy race, a 600 cubic inch piston displacement event, and succeeded in pulling down third place.

In the fall races of the same year the Monk also played a prominent part. On October 9 this Mercer car won the 300 cubic inch class of the Fairmount Park race over a course of 202.5 miles and on November 27 it captured the Savannah challenge trophy race at 222.3 miles. Ralph De Palma, then the champion track driver of the country, recognized the speed and endurance possibilities of the Monk and when he started his 1912 racing season he placed his reliance in this car. The "jinx" that had long followed in De Palma's wake as a road race driver was completely put to rout when the Italian pilot drove the Monk to victory in the 800 cubic inch class of the Santa Monica contests that spring.

The Monk was then sold by the California Mercer dealers and pressed into general touring service until this year, when its owner entered it in the Santa Monica race. It is now likely that the Monk will spend the remainder of its days as a touring vehicle.

### MOTOR TRADE BRIEFS.

Paul La Croix has signed for three years as importer of Mercedes cars for the United States, Canada and Mexico. His new company, which will handle only the Mercedes, is to be called the Foreign Automobile Importation Company.

The Moline Automobile Company, makers of the Dreadnought, have acquired a Knight license and will make a four cylinder machine for the 1914 market with a sliding sleeve motor. This will be in addition to poppet valve types as well.

The Pierce-Arrow Motor Car Company has produced a two ton truck of the worm drive type. The truck has a 30 horsepower, four cylinder motor. One of the novel points is in the motor and gear suspension. They are bolted to a rigid steel subframe and this in turn is mounted on three points on the subframe.

Announcement from the White Company tells of several big sales of motor trucks. The largest is an order from the Kaufmann-Baer company department store of Pittsburgh amounting to fifty-eight trucks. Another is of fourteen trucks to the Gulf Refining Company, following an original order for twelve and a third is for nine trucks to the Frank Parmelee Company, baggage handlers in Chicago.

Louis P. Desbriats, vice-president of the Ajax-Grieb Rubber Company, sails in a few days for a vacation trip of six weeks abroad. M. Desbriats is going to France, where he has not been since leaving there as a young man, chiefly to see his father, now grown old. This will be his first vacation of any kind since he went with the Ajax-Grieb Rubber Company in 1905.

### VAUGHAN SIX A CLIMBER.

Country Around Kingston Provides an Effective Test.

Ernest C. Cox, Eastern manager for the Rayfield carburetor, is telling of a run of forty miles which he took recently in one of the new Vaughan sixes at the invitation of E. S. Partridge, sales manager for the Vaughan, Chester Griswold, the consulting engineer, was at the wheel. The road was from Kingston via Stone Ridge to High Falls and then to Mountain Rest, right over Mohonk Mountain and back to Kingston through New Paltz.

Grades over the mountain at times were so steep that Cox on his return was not satisfied until he had looked up the Government survey, which showed at several points 22 per cent. The run of forty miles was made in one hour and a

half. Eighteen miles was over mountain roads with water breaks every fifty feet. The scenery was superb from the top of Mohonk Mountain. "It is good country over which to test a car," says Cox.

### Bosch Ignition on Winning Cars.

At Elgin the Mercer using Bosch magnetos and plugs won the Cuba trophy race and the Stutz using the same equipment won the Elgin national road race; all cars to receive the checkered flag used Bosch magnetos and plugs too.

### When Did They Do Any Work?

On one warm day recently the office employees of the Studebaker Corporation's plant 1 in Detroit drank the contents of thirty-eight six gallon bottles of distilled water.

## CHALMERS NEW CARS HAVE NOVEL POINTS

Non-Stallable Motor and Wire  
Wheels Are Among  
Features.

### SOME OTHER LATE MODELS

Moon and Reo Cars Coming Out  
With Offerings for  
1914 Market.

The 1914 or "new series" or whatever the most recent models of the various automobile companies are called are making their appearance one by one. Although some concerns have had their new things out for some months, in the main the early autumn seems to be about the time to trot out the novelties and show upon what the campaign is to be based to get the general trade. Each mail brings information to the newspaper offices of new offerings in the automobile world and a few of them are given herewith.

Of these, one very important is the Chalmers, which brings out two striking looking cars at prices reduced from last season. One particular point of the Chalmers six is the electric self-starting system, by means of which the car motor is rendered "non-stallable." The starter is the Chalmers-Entz. This is related to the electric starters on the White and Franklin cars.

The non-stallable feature is thus described: "Should the driver fail to give the motor sufficient gas after throttling down and starting up again in going through heavy traffic or over a bad piece of road, the motor will pick up the instant the clutch is released to change the gears. The engineers in all their experiments and tests have never been able positively to stall the new motor. This feature is made possible through the application of the electric starter, which is always in positive connection with the engine of the car."

One motion, that of throwing a knife switch on the dash, is necessary to start the car. The one switch also controls the ignition, which in every other way is separate from the starter system, the

single system Bosch magneto being used. The starter switch is left open while the car is running. This system also provides current for electric lights, electric horn, dash light and inspection lamp, cigar lighter or other electrical equipment. A feature of the lighting system is the combination headlights, which give 24 candle-power searchlights for country driving and 6 candle-power lamps for city use.

Wire wheels as optional equipment are furnished on the Chalmers six. The car comes in six body types, of the streamline model. The motor bonnet is tapered, the dash cowl is very long and there are distinctive moulded oval fenders. The gasoline tank and spare tire carrier are at the rear. Left hand drive and centre control are other features.

Through better quality of steel in the moving parts of the motor a great reduction in weight has been got. The motor is 4 by 5½, with vibration at a minimum it is contended. A claim is made of an ability to go from two miles an hour to the high speed and it is said that the car may be started on the high gear.

In the 1914 announcement of the Moon Motor Car Company a prediction is made that the lightweight six will mark a revolution in automobile industry in the coming year. The new car has the streamline body, large doors with concealed hinges, wind shield as a part of the cowling, running boards entirely clear, gasoline tank and tire carriers in the rear, left hand drive, centre control, both front doors opening, low swing body, four speeds ahead and reverse, with direct on third, Delco electric lights, electric cranker and ignition with automatic spark control, instrument board under cowl, disappearing seats and motor tire air pump. The motor is cast in triplicate, 3½ by 5¼, developing 55 horse-power.

The new model four cylinder car, the 42, has the general specifications of the six. The motor is the T head type, cast in pairs, 4½ by 5, developing 42 horse-power. It has three speeds ahead and reverse.

The Moon coupe has sashless windows, wide opening seat and a special compartment for carrying spare tires. The "Faster" has become a standard type with the Moon with this year. This type has been built for the last two years for the New York agency, where there is a special demand for a distinctive speed car. A roadster is also included in the line.

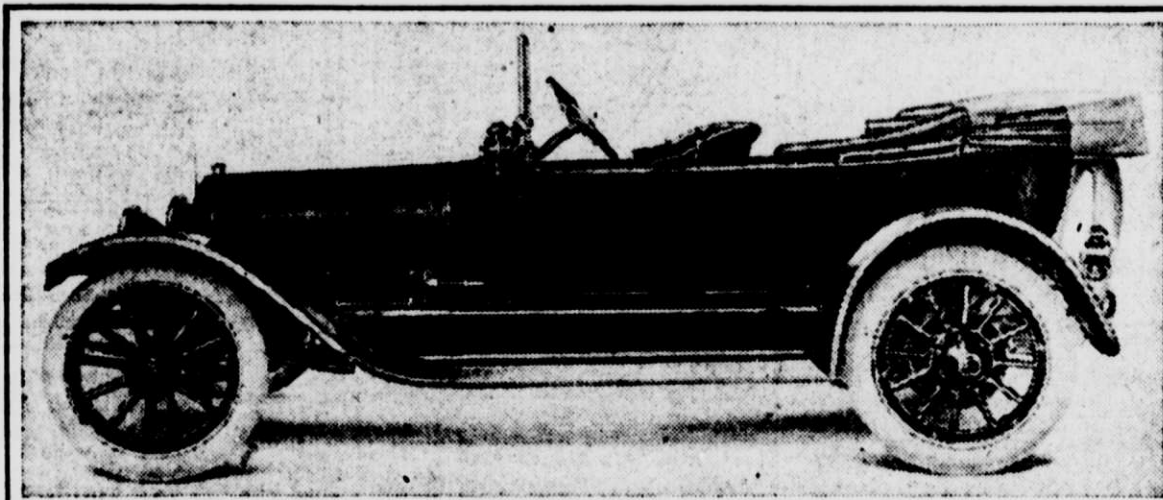
A new fall series for the Reo 30 horse-power touring car and roadster carrying with it a reduction from the former price. The touring car and roadster are both equipped with electric starter with generator, electric lights, electric horn speedometer, motor for curtains and envelope, extra demountable rim, including a standard equipment of tools and accessories. The instrument board, with all instruments set flush, is placed within the easy reach of the driver. The wind shield, of new and special design, is ventilating, clear vision and rain vision. The electric searchlights have a dimming attachment, an innovation that will be appreciated by drivers wherever the local ordinances prohibit the use of searchlights. The new style tire carrier on the back holds the full light and number tag so as to comply with all laws.

The wheels are 34 inch, with demountable rims; tires, 34 by 4, front and rear, which afford ample overcapacity. The one rod Reo control is retained. Both brakes are operated by foot pedals, thus making the driver's entrance from either side clear.

### Has Shifted Many a Tire.

In five years of service George Benninger, foreman of the tire mounting and repair department at one of the Studebaker plants in Detroit, has mounted on wheels and rims 250,000 automobile tires. He has a record of mounting with his own hands 319 tires in one working day.

## Buick a Builder of Sixes Too



For 1914 the Buick has a six cylinder which has left drive, electric starting and lighting, and a 48 horse-power motor. The car, which is called B-35, sells just below \$2,000.

## A New Way of Buying Mack Trucks

The International Plan of Purchase and the  
Following Reduced Prices Are Now in Effect

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Price, the balance being divided into

12 equal payments. In other words,  
you get immediate use of a MACK  
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12 months.

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1½-ton	2,350
2-ton	2,700
3-ton	3,400
5-ton	4,000
7½-ton	4,500
3-ton Dump	\$4,000
5-ton "	4,500
7½-ton "	5,000

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When you buy a MACK truck you REALLY are buying International Service. International service keeps your trucks on the streets. International Service cuts a big slice from the usual cost of operating trucks.

A letter from you brings information which you can cash into transportation profits.

## INTERNATIONAL MOTOR COMPANY

General Offices, Broadway & 57th Street, New York  
Territory still open for responsible and capable agents.

## Silver and His Men in New Overland



The Overland for 1914 with O. T. Silver, local distributor, at the wheel. Next him is Arthur Phillips, manager of his stock department. In the tounge are H. B. Shonts, sales manager; Herman Darmstadt, service manager, and Walter E. White, manager of wholesale department.